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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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FISH & RICHARDSON, PC		
P.O. BOX 1022		
MINNEAPOLIS, MN 55440-1022		

EXAMINER	
SWEARINGEN, JEFFREY R	

ART UNIT	PAPER NUMBER
2145	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/846,521

Applicant(s)

MATHENY ET AL.

Examiner

Jeffrey R. Swearingen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16 and 18-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16 and 18-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED-ACTION

Election/Restrictions

1. Applicant's election without traverse of Claims 16 and 18-26 in the reply filed on 12/19/2006 is acknowledged.

Response to Arguments

2. Applicant's arguments filed 4/23/2007 have been fully considered but they are not persuasive.
3. As previously addressed in the non-final office action of 3/15/2006, the removal of duplicate data entries from a discovery document was taught in Farrell in the removal of duplicate entries by the aggregation processor. See column 4, lines 15-30.
4. Applicant's additional limitations involving agents present during installation and agents added in an upgrade is not supported by the specification, and is new matter.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. No support exists within the specification for agents present during installation or agents registered during an upgrade without modifying the first plurality of agents or discovery methodology.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 16, and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Farrell et al. (U.S. Patent No. 6,751,663).

9. In regard to claim 16, Farrell disclosed an article, including instructions residing on a computer-readable medium to

receive discovery data collected from a network device by a first plurality of discovery agents registered during installation; Farrell, column 2, lines 25-39; column 3, lines 47-49

receive discovery data collected from a network device by an additional discovery agent registered during an upgrade; Farrell, column 2, lines 25-39; column 3, lines 47-49

10. *aggregate discovery data collected from a second plurality of discovery agents, the second plurality of discovery agents including the first plurality of discovery agents and the additional discovery agent; Farrell, column 18, line 40 – column 19, line 11.*

generate a relationship file characterizing relationships among network devices identified by the second plurality of discovery agents; (column 6, lines 42-50)

coalesce the discovery data in a software file comprising a discovery document; said discovery data including two or more duplicate data entries; and column 4, lines 15-30

remove all but one of the duplicate data entries from the discovery document. See Farrell, Abstract; column 2, lines 35-50, column 3, lines 7-17 and 46-58; column 4, lines 15-31.

11. In regard to claim 25, Farrell further disclosed *receiving discovery data collected from a plurality of network devices by said second plurality of discovery agents. See Farrell, column 2, lines 25-39; column 3, lines 47-49.*

12. In regard to claim 26, Farrell is applied as in claim 16. Farrell further disclosed *store the discovery document in a discovery database; and generate a key for each discovered network device in the discovery document.*

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See Farrell, column 7, line 50 – column 9, line 41. See Farrell, Table 1. Farrell assigned identifiers and translates collected information into network accounting records, which is the same as assigning keys for devices and appending the keys to the document.

Claim Rejections - 35 USC § 103

13. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell and Barrett et al. (U.S. Patent No. 6,633,909).

2. In regard to claims 18-19 Farrell is applied as in claims 12, 16 and 28. Farrell failed to disclose the use of an agent directory. However, Barrett disclosed an agent directory. See Barrett, Abstract; column 2, line 57 – column 3, line 9. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Farrell and Barrett because the network management station has to be made aware of the agent. See Barrett, column 1, lines 49-62. Farrell gave motivation for the combination by stating data collection systems [agents] are used to collect information from network traffic flow and deliver the data. See Farrell, column 1, lines 7-30.

3. In regard to claim 18, Farrell further disclosed the use of *two or more discovery agents*. See Farrell, column 2, lines 25-39; column 3, lines 47-49.

4. In regard to claim 19, Farrell further disclosed the use of *two or more aggregator agents*. See Farrell, column 18, line 40 – column 19, line 11.

14. Claims 20, 24 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell, in view of Libert et al. (U.S. Patent No. 6,574,655).

15. In regard to claim 20, Farrell is applied as in claim 16. Farrell failed to disclose the use of XML to describe agents. However, Libert used XML to describe agents. See Libert, column 6, lines 58-61. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Farrell with Libert for the purpose of allowing the agent information to be used by

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heterogeneous peers during a discovery process. See Libert, column 3, line 63 – column 4, line 32.

Farrell gave motivation by stating that disparate network devices can be used in the discovery process. If devices were not operating under the same set of protocols (e.g. disparate), then unless a common method such as XML is used for communication, one of ordinary skill in the art would have known that the devices would not be able to communicate. See Farrell, column 2, lines 30-34.

16. In regard to claims 24 and 30, Farrell is applied as in claims 16 and 28. Farrell failed to disclose the use of XML to describe agents. However, Libert used XML to describe agents. See Libert, column 6, lines 58-61. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Farrell with Libert for the purpose of allowing the agent information to be used by heterogeneous peers during a discovery process. See Libert, column 3, line 63 – column 4, line 32. Farrell gave motivation by stating that disparate network devices can be used in the discovery process. If devices were not operating under the same set of protocols (e.g. disparate), then unless a common method such as XML is used for communication, one of ordinary skill in the art would know that the devices would not be able to communicate. See Farrell, column 2, lines 30-34.

17. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell in view of Fletcher et al. (WO 98/26541).

18. In regard to claim 21, Farrell is applied as in claim 16. Farrell failed to disclose eliminating duplicate data entries from different agents by use of a priority value. However, Fletcher disclosed assigning different priorities to different agents and using this priority to eliminate duplicate data reports. See Fletcher, page 21, lines 29-31. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Farrell and Fletcher for the purpose of reducing unnecessary network traffic overhead and eliminating duplicate information. See Fletcher, page 21, lines 10-13. One of ordinary skill in the art at the time of the invention would have known that reducing network traffic would increase the speed and collisions within the entire network, while eliminating duplicate data entries would increase processor efficiency.

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19. In regard to claim 22, Farrell and Fletcher are applied as in claim 21. Farrell further disclosed *receiving discovery data collected from two or more network device[s] by said two or more discover agents*. See Farrell, column 2, lines 25-39; column 3, lines 47-49.

20. In regard to claim 23, Farrell is applied as in claim 21. Farrell further disclosed the use of *two or more aggregator agents*. See Farrell, column 18, line 40 – column 19, line 11.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

RoyChoudhury, Romit et al. "A distributed mechanism for topology discovery in ad hoc wireless networks using mobile agents." Proceedings of the 1st ACM international symposium on Mobile ad hoc networking & computing. IEEE Press. November 2000. 145-46.

Gupta et al.

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22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. Swearingen whose telephone number is (571) 272-3921. The examiner can normally be reached on M-F 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571-272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jason Cardone
Supervisory Patent Examiner
Art Unit 2145

JRS